Page 89, line 18, replace "now allowed" with --now U.S. Patent No. 5,539,775.--.

Page 137, line 23, after "as inventors," insert --now U.S. Patent No. 5,480,834--.

Page 185, line 2, change "show" to --shown--.

Page 188, line 20, after "diagram" insert --(see Figs. 69 and 70)--.

In the Claims

Cancel claims 1-252 in favor of new claims as follows.

--253. An amplifier configured to be powered by a selectively engageable voltage source, the amplifier comprising:

a differential amplifier having first and second inputs for receiving an input signal to be amplified, and having an output;

first resistances between the voltage source and respective inputs of the differential amplifier; and

second, selectively engageable, resistances between the voltage source and respective inputs of the differential amplifier, the second resistances respectively having smaller resistance values than the first resistances, the second resistances being engaged then disengaged in response to the voltage source being engaged.

254. An amplifier in accordance with claim 253 and further comprising coupling capacitors respectively coupled to the first and second inputs.

255. An amplifier in accordance with claim 253 and further comprising a voltage divider, and wherein the first and second resistances are coupled to the voltage source via the voltage divider.

256. An amplifier in accordance with claim 253 wherein the first resistances comprise respective transistors.

257. An amplifier in accordance with claim 253 wherein the first resistances comprise respective p-type transistors.

258. An amplifier in accordance with claim 253 wherein the second resistances comprise respective transistors.

259. An amplifier in accordance with claim 253 wherein the second resistances comprise respective p-type transistors.

260. A method of speeding power up of an amplifier stage configured to be powered by a voltage source and including a differential amplifier having first and second inputs configured to receive an input signal to be amplified, and having an output; and resistances between the voltage source and respective inputs of the differential amplifier, the method comprising:

shorting around the selectively resistances for an amount of time in response to the voltage source being engaged.

261. A method in accordance with claim 260 wherein the shorting comprises engaging selectively engageable second resistances respectively coupled in parallel with the first mentioned resistances and having respective resistance values lower than the first mentioned resistances.

262. A method of speeding power up of an amplifier stage configured to be powered by a voltage source and including first and second electrodes configured to receive an input signal to be amplified, the input electrodes being adapted to be respectively coupled to coupling capacitors; a differential amplifier having inputs respectively connected to the first and second electrodes, and having an output; and resistances between the voltage source and respective inputs of the differential amplifier, the method comprising:

shorting around the resistances for a predetermined amount of time in response to the voltage source being engaged, the shorting comprising engaging selectively engageable second resistances respectively coupled in parallel with the first mentioned resistances and having respective resistance values lower than the first mentioned resistances.

263. A receiver comprising:

a Schottky diode detector;

an amplifier coupled to the Schottky diode detector and configured to be powered by a selectively engageable voltage source, the amplifier including:

a differential amplifier having first and second inputs coupled to the Schottky diode detector to amplify a signal generated by the Schottky diode detector, and having an output;

first resistances between the voltage source and respective inputs of the differential amplifier; and

second, selectively engageable, resistances between the voltage source and respective inputs of the differential amplifier, the second resistances respectively having smaller resistance values than the first resistances, the second resistances being engaged then disengaged in response to the voltage source being engaged.

264. A receiver in accordance with claim 263 and further comprising coupling capacitors respectively coupled between the Schottky diode detector and the first and second inputs of the differential amplifier.

265. A receiver in accordance with claim 263 wherein the amplifier further comprises a voltage divider, and wherein the first mentioned and second resistances are coupled to the voltage source via the voltage divider.

266. A receiver in accordance with claim 263 wherein the first mentioned resistances of the amplifier comprise respective transistors.

267. A receiver in accordance with claim 263 wherein the first mentioned resistances of the amplifier comprise respective p-type transistors.

268. A receiver in accordance with claim 263 wherein the second resistances of the amplifier comprise respective transistors.

269. A receiver in accordance with claim 263 wherein the second resistances comprise respective p-type transistors.

270. A method of speeding power-up of an amplifier stage of a receiver having a Schottky diode detector, the amplifier stage being configured to be powered by a voltage source and including a differential amplifier having first and second inputs configured to receive an input signal to be amplified from the Schottky diode detector, and having an output; and selectively resistances between the voltage source and respective inputs of the differential amplifier, the method comprising:

shorting around the resistances for an amount of time in response to the voltage source being engaged.

271. A method in accordance with claim 270 wherein the shorting comprises engaging selectively engageable second resistances respectively coupled in parallel with the first mentioned resistances and having respective resistance values lower than the first mentioned resistances.

272. A method of speeding power up of an amplifier stage of a receiver having a Schottky diode detector, the amplifier stage being configured to be powered by a voltage source and including first and second electrodes configured to receive an input signal to be amplified, the input electrodes being adapted to be respectively coupled to the Schottky diode detector by coupling capacitors to amplify a signal generated by the Schottky diode detector; the amplifier stage further including a differential amplifier having inputs respectively connected to the first and second electrodes, and having an output; and selectively engageable resistances between the voltage source and respective inputs of the differential amplifier, the method comprising:

shorting around the selectively engageable resistances for a predetermined amount of time in response to the voltage source being engaged, the shorting comprising engaging selectively engageable second resistances respectively coupled in parallel with the first mentioned resistances and having respective resistance values lower than the first mentioned resistances.

273. A receiver comprising:

an RF detector;

an amplifier coupled to the RF detector and configured to be powered by a selectively engageable voltage source, the amplifier including:

a differential amplifier having first and second inputs coupled to the Schottky diode detector to amplify a signal generated by the Schottky diode detector, and having an output;

first resistances between the voltage source and respective inputs of the differential amplifier; and

second, selectively engageable, resistances between the voltage source and respective inputs of the differential amplifier, the second resistances respectively having smaller resistance values than the first resistances, the second resistances being engaged then disengaged in response to the voltage source being engaged.

274. A receiver in accordance with claim 273 wherein the RF detector comprises a Schottky diode detector.

275. A receiver in accordance with claim 273 wherein the second resistances comprise transistors.

276. An amplifier configured to be powered by a selectively engageable voltage source, the amplifier comprising:

a differential amplifier having first and second inputs for receiving an input signal to be amplified, and having an output;

a first resistance between the voltage source and the first input of the differential amplifier;

a second resistance between the voltage source and the second input of the differential amplifier;

a third, selectively engageable, resistance between the voltage source and the first input of the differential amplifier, the third resistance having a smaller resistance value than the first resistance; and

a fourth, selectively engageable, resistance between the voltage source and the first input of the differential amplifier, the fourth resistance having a smaller resistance value than the first resistance, the third and fourth resistances being engaged then disengaged in response to the voltage source being engaged.

277. An amplifier in accordance with claim 276 wherein the third and fourth resistances are simultaneously engaged then disengaged in response to the voltage source being engaged.

278. An amplifier in accordance with claim 276 wherein the first resistance comprises a transistor.

279. An amplifier in accordance with claim 278 wherein the second resistance comprises a transistor.

280. An amplifier in accordance with claim 276 wherein the third resistance comprises a transistor.

281. An amplifier in accordance with claim 280 wherein the fourth resistance comprises a transistor.

282. A method of speeding power up of an amplifier stage configured to be powered by a voltage source and including a differential amplifier having first and second inputs configured to receive an input signal to be amplified, and having an output, a first resistance between the voltage source and the first input of the differential amplifier, and a second resistance between the voltage source and the second input of the differential amplifier, the method comprising:

simultaneously shorting around the first and second resistances for an amount of time in response to the voltage source being engaged.

283. An amplifier configured to be powered by a selectively engageable voltage source, the amplifier comprising:

a differential amplifier having first and second inputs for receiving an input signal to be amplified, and having an output;

a first resistance between the voltage source and the first input of the differential amplifier;

a second resistance between the voltage source and the second input of the differential amplifier;

circuitry configured to switch around the third and fourth resistances for a predetermined amount of time, to cause the inputs to the differential amplifier to come up to a bias voltage more quickly, in response to the voltage source being engaged.

284. An amplifier in accordance with claim 283 wherein the circuitry configured to switch around the third and fourth resistances comprises respective transistors.

285. An amplifier in accordance with claim 284 wherein the first resistance comprises a transistor.

286. An amplifier in accordance with claim 285 wherein the second resistance comprises a transistor.

287. A method of speeding power up of an amplifier stage configured to be powered by a voltage source and including a differential amplifier having first and second inputs configured to receive an input signal to be amplified, and having an output, a first resistance between the voltage source and the first input of the differential amplifier, and a second resistance between the voltage source and the second input of the differential amplifier, the method comprising:

simultaneously switching around the first and second resistances for a predetermined amount of time in response to the voltage source being engaged.--